

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

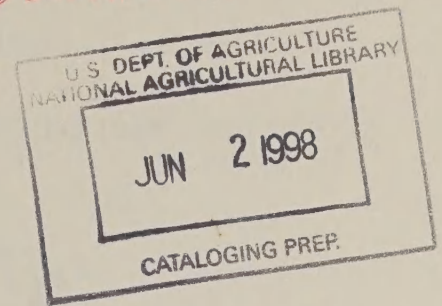
Reserve
aHD1761
.D35
1963

**United States
Department of
Agriculture**



National Agricultural Library

Series Special Reports
Changes in Farm----



A PROFILE OF AGRICULTURE
PROJECTED TO 1968

U. S. Department of Agriculture
Economic Research Service
November 1963

UNITED STATES DEPARTMENT OF AGRICULTURE
Economic Research Service

A PROFILE OF AGRICULTURE PROJECTED TO 1968

Talk by Rex F. Daly

Economic and Statistical Analysis Division
at the 41st Annual Agricultural Outlook Conference
Washington, D. C., 2:30 P.M., Tuesday November 19, 1963

The research on which this talk is based was prepared under the general direction of the ERS Committee on Economic Projections: R. F. Daly (Chairman), G. T. Barton, R. E. Olson, Q. M. West, M. M. Regan, and R. H. Masucci. Alvin C. Egbert, Head Long-run Projections Section, ESA, assisted by D. D. Durost, FPED; L. R. Brown, RAD; and J. D. Ahalt, ESA carried the major responsibility for analyzing the projections and drafting the preliminary report. The research also reflects the work of many other staff members from each Division of ERS, including the commodity specialists participating in this Conference.

The story of the postwar technological revolution in U. S. agriculture has been told repeatedly. Although we need not dwell on this story of abundance, a little background will give us some perspective.

In general, markets for U. S. farm products continued to grow following adjustments from swollen demands, associated with World War II and the Korean conflict. In the past decade, however, the rise in domestic markets has been only slightly more than population growth even though farm product prices declined about 8 percent and the per capita buying power of consumers increased almost a fifth. Total domestic food use of farm products increased about 2.0 percent per year; nonfood uses rose less than 1.0 percent per year. These rates add to an average annual increase of 1.8 percent in total domestic use of farm products compared with an annual population growth of about 1.7 percent. Exports have risen sharply in the past decade and this year will reach a new high, possibly about double the volume exported in 1952-54. Total utilization--domestic use and exports--has increased at an annual rate of about 2.4 percent.

On the other hand, various crop adjustment programs have limited the rise in farm output over the 10 years ending in 1963 to around 18 to 19 percent--an annual increase of about 1.7 percent. This difference in output-utilization growth rates can be explained. In 1963 part of increased utilization was supplied by "drawing down" stocks, particularly of grain. But in 1952-54 output exceeded utilization resulting in a net stock build-up equal to about 5 percent of output. In addition, imports have grown about twice as fast as the population.

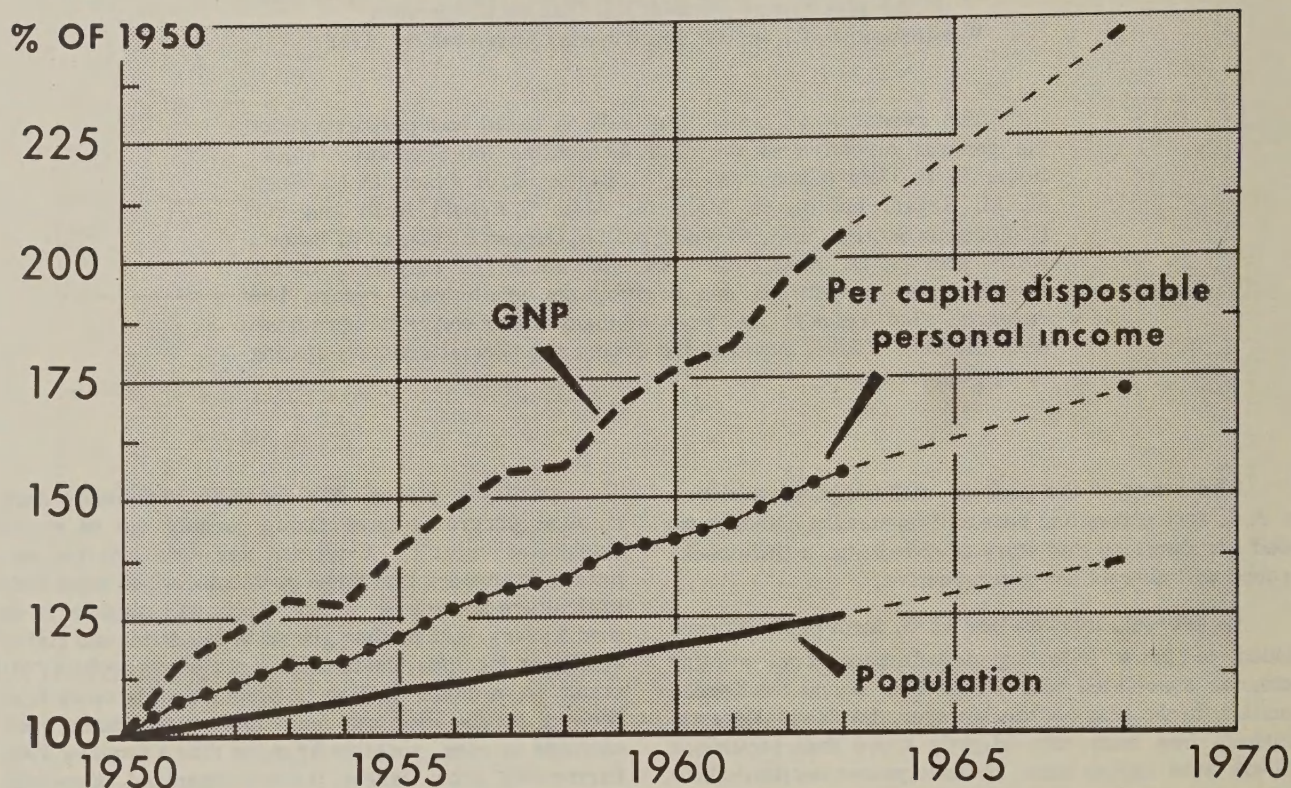
Declining prices, low incomes and costly agricultural programs have grown largely out of excess productive capacity. Extending our view into the near future, it appears that these problems, which have beset agriculture in the past decade, likely will continue in the next 5 years. With further growth in population and rising consumer incomes, current farm programs probably will result in a small decline in prices and incomes from present levels. But net farm income per farm would continue to rise, possible by more than a tenth by 1968. Farms will grow larger, more mechanized, more efficient, and become fewer in number. And, shifts in resource use will accompany a further decline in the use of farm labor and in the farm population. Let us examine in some detail the major assumptions and analyses which back up the near-term outlook for agriculture.

MAJOR ASSUMPTIONS

This appraisal assumes a growing population, continued expansion in the general economy and current farm programs including the wheat program for the 1964 crop. Population is expected to rise from 1963 to 1968 by around 9 percent from 189 million to 206 million--an annual growth of nearly 1.7 percent. With more workers and a continuation of the uptrend in productivity, the projected gross national product of the economy increases by about a fifth from 1963 to 1968 or about 4 percent per year. Rising employment and higher wage rates would increase per capita consumer buying power by about 12 percent from 1963 (figure 1).

POPULATION AND GENERAL ECONOMIC GROWTH

1950-63 and Projections to 1968



U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 2496-63 (10) ECONOMIC RESEARCH SERVICE

Figure 1

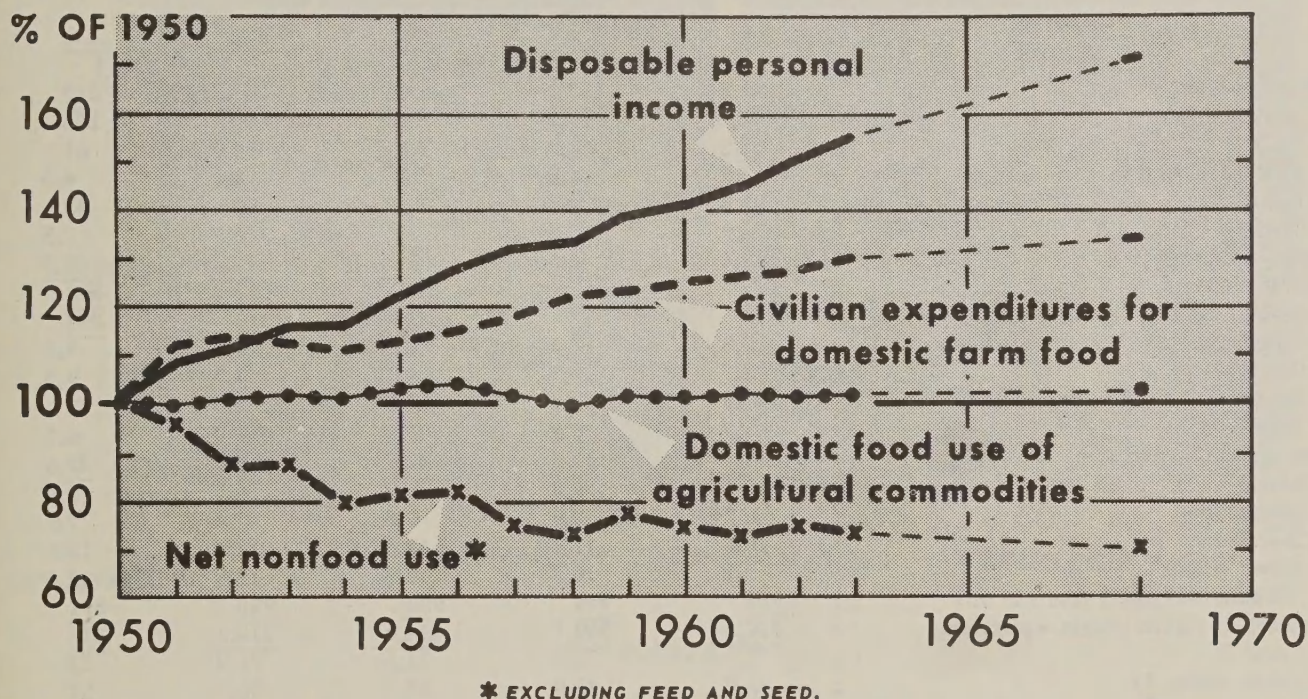
Except for wheat, farm programs assumed as a basis for these projections are those in effect for 1963 crops. The wheat program for the 1964 crop was assumed with a support price of \$1.25 per bushel for participating producers who plant within their acreage quotas. Similarly, the 1963 feed grain program was assumed to continue through 1968. Accordingly, a loan rate of \$1.10 per bushel was assumed for corn, with comparable supports for other feed grains, and a direct payment of 15 cents per bushel to participating growers.

Contingency reserve carryover stocks were assumed as follows: Around 600 million bushels for wheat; 45 million tons for feed grains; and 6 million bales for cotton. The Conservation Reserve would be reduced as contracts terminate. Other acreage control programs, marketing agreements and orders, domestic distribution programs, and the Food for Peace export program would continue as provided by legislation in effect during 1963.

DEMAND FOR FARM PRODUCTS

As incomes rise, the consumer varies his diet and tends to spend more for it, but per capita consumption changes very little. Estimates for 1963 put the index of per capita domestic use of farm products (food and nonfood) at about 1 1/2 percent above the 1952-54 average; per capita food consumption is up about 3 percent but nonfood uses are nearly a tenth lower. Pounds of food consumed per person declined over the decade. At the same time per capita buying power of the consumer rose 19 percent and prices for food, adjusted for price level change, declined nearly 5 percent. These changes and statistical analyses based on the postwar years demonstrate overwhelmingly that the demand for farm products is very inelastic. The domestic market, consequently, has grown about the same as population (figure 2). But export markets have increased rapidly, reflecting expanded commercial markets supplemented by Food for Peace and related export programs.

PER CAPITA CONSUMPTION OF FARM PRODUCTS RELATIVE TO CONSUMER INCOME 1950-63 and Projections to 1968



U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 2495-63 (10) ECONOMIC RESEARCH SERVICE

Figure 2

Domestic Markets

Although total domestic food consumption is expected to rise a little more than the population, consumers' expenditures for food will continue to rise. Per capita expenditures for food in 1963 will total around 17 percent above the 1952-54 average; per capita incomes will be up 36 percent. A further rise is projected in dollars spent by the consumer for food, primarily for the purchase of more processing and distributing services attached to food, though part of the increase may reflect a shift toward more higher priced foods.

PER CAPITA CONSUMPTION TRENDS

Even though the amount of food consumed per person changes very little, increases in consumer income, changes in relative prices, and other forces influencing consumer preference have a considerable impact on the consumption of individual foods. Per

capita consumption of beef in 1963 may total 95 pounds, 22 pounds more than the 1952-54 average; consumption of pork is about unchanged at 65 pounds. Consumption of poultry (chicken and turkey) increased more than 10 pounds to about 37 1/2 pounds per person in 1963. On the other hand, per capita consumption of such animal products as eggs was down 8 pounds and dairy products some 62 pounds from the 1952-54 average.

These divergent trends for livestock products reflect income and price changes and the consumer's response to them. But they also reflect such influences as the concern about animal fats relative to obesity and health considerations. With rising incomes and little change in relative prices many of the above trends in eating habits will continue in the next 5 years.

Table 1.--Per capita consumption of food, 1952-54, 1957-59,
1962, 1963 and projections for 1968

Commodity	Average		1962	Prelimi- nary 1963	Projected 1968 ^{1/}
	1952-54	1957-59			
	Lb.	Lb.	Lb.	Lb.	Lb.
Meat (carcass weight)	179.2	190.1	200.9	207.3	212
Beef and veal	82.2	89.2	94.6	100.1	106
Pork	65.3	63.0	63.9	64.9	61
Lamb and mutton	4.5	4.4	5.2	4.9	4.5
Chicken	22.3	27.5	30.1	30.6	33
Turkey	4.9	6.0	7.1	6.8	7.5
Eggs, farm weight	49.6	46.6	42.4	41.3	38.5
Dairy products, total (milk equivalent)	697	677	636	635	598
Fluid milk and cream (milk equivalent)	349	337	311	310	292
Evaporated and condensed milk	17.3	14.8	12.5	12.0	9.5
Cheese	7.7	7.9	9.1	9.3	9.5
Ice cream (net milk equivalent)	47.6	50.4	51.7	52.0	52
Butter	8.7	8.2	7.2	7.0	6.5
Fats and oils (excluding butter)	39.1	40.4	42.7	41.6	42.6
Lard	11.1	9.3	7.2	6.7	6.4
Margarine	8.2	8.9	9.3	9.4	9.9
Shortening	10.7	11.4	13.5	13.2	13.5
Other edible	9.1	10.8	12.7	12.3	12.8
Total, livestock, fats and oils	965	954	922	925	891
Vegetables (farm weight equivalent)	207.3	209.8	214.6	213.8	218
Fresh ^{2/}	73.9	72.6	71.6	71.4	72
Fresh, other ^{3/}	43.2	38.9	37.7	36.7	37
Frozen	11.7	14.9	17.8	17.6	18
Canned	78.5	83.4	87.5	88.1	91
Potatoes, white (fresh equivalent)	106	107	109	112	108
Melons	27.6	25.1	23.3	23.7	22
Fruits (farm weight equivalent)	200.2	199.2	195.2	181.1	199.5
Citrus, fresh	43.0	33.5	28.8	22.1	29
Apples, fresh	20.8	21.6	19.5	19.9	19.5
Other, fresh	45.8	43.7	40.4	41.3	40.0
Citrus, processed	42.3	49.0	54.3	44.3	54
Other, processed	34.9	39.8	41.3	42.4	47
Dried fruit	13.4	11.6	10.9	11.1	10
Cereals (grain equivalent)	253.4	237.2	232.8	231.5	228.4
Wheat and flour	183	168	160	159	156
Rice, milled	5.3	5.6	6.2	6.5	5.7
Corn	46.2	45.3	48.1	48.0	49
Other grains	10.4	10.1	10.1	10.0	10
Dry beans and peas	8.5	8.2	8.4	8.0	7.7
Sugar, refined	96.6	96.1	97.2	97.2	98
Coffee (green bean equivalent)	16.2	15.8	15.9	16.2	16.8
Total food from crops, except oils	907	890	888	876	891
Total food, crops and livestock products	1,872	1,844	1,810	1,801	1,782

^{1/} Based on projected changes in consumer income, relative prices, and trends in consumer preference.

^{2/} Leafy, green and yellow plus tomatoes, cucumbers, corn and celery less cabbage.

^{3/} Includes sweetpotatoes.

MORE POULTRY, RED MEAT IN DIET BY 1968

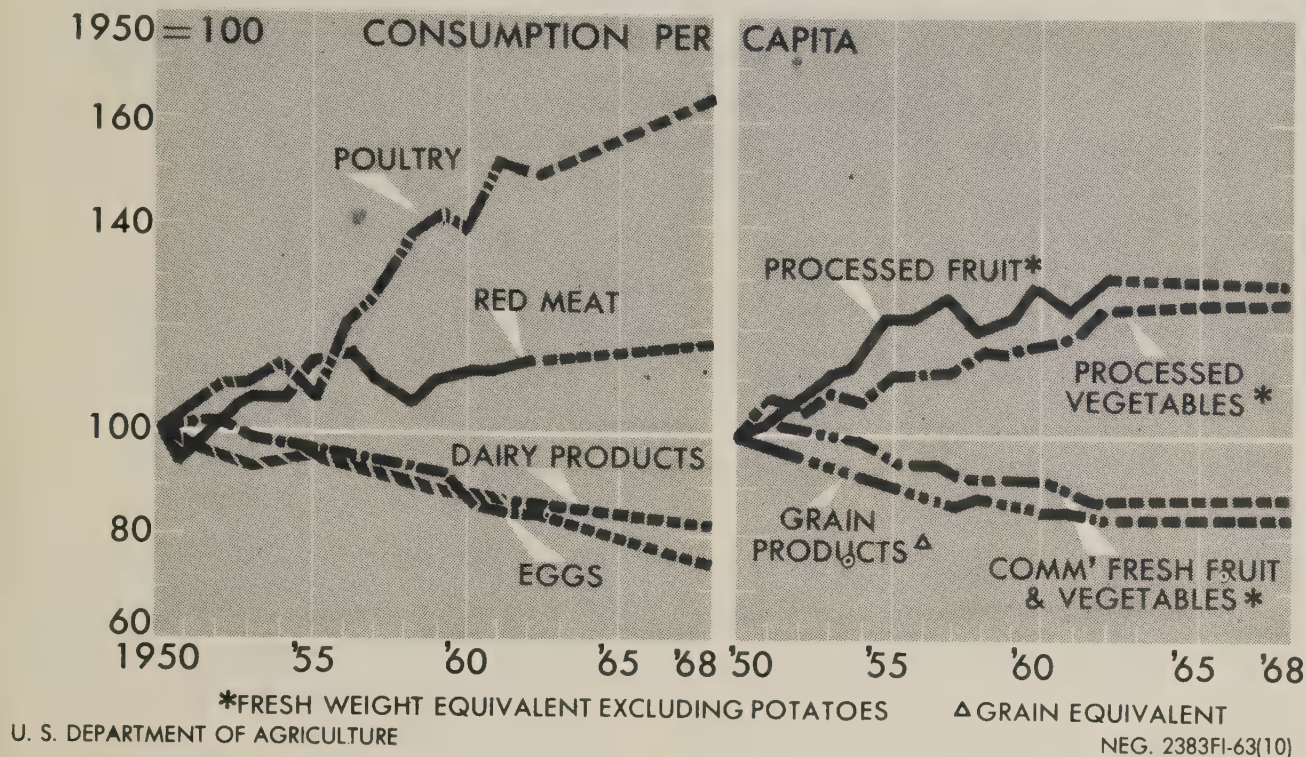


Figure 3

Relative stability in per capita use of food fats and oils conceals substantial declines in the consumption of animal fats (butter and lard) and an uptrend in per capita use of vegetable oils in margarine, shortening and salad dressing. Among the crops a pronounced shift is evident in consumption away from the cereals and fresh uses of fruits and vegetables and toward more frozen, processed, and other convenience foods. These trends are largely offsetting; per capita consumption of fruits and vegetables, in fresh weight equivalent, has changed very little over the past decade. Greatly increased use of processed potatoes has arrested the long-run decline in per capita consumption of potatoes in recent years (table 1). Many of the above shifts in the food use of crops reflect, in addition to income and price changes, the consumer's demand for convenience foods, his concern about being overweight, considerations of health and nutrition and such influences as population shifts, changes in age composition and possibly even food fads. Projections for 1968 reflect the continuation of most of these forces which have influenced diet changes in recent years (figure 3).

NONFOOD USES OF FARM PRODUCTS

Per capita nonfood uses of farm products (excluding feed and seed) in 1963 average nearly one-tenth below 1952-54. Development of new fibers which compete with cotton and wool and development of materials competitive with fats and oils in the manufacture of soap and paints have played a key role in limiting nonfood uses of farm products. Such industrial uses likely will continue to be very responsive to changes in relative prices and to the general competitive position of raw materials. Per capita consumption of tobacco changed little in the past 10 years and may not change much in coming years pending the impact of new developments relating to health considerations. Nonfood uses of grain include primarily grain for alcohol, corn starch and for some other nonfood uses (table 2). Although further declines in per capita nonfood uses are in prospect, they likely will be less rapid than during the past decade.

Table 2.--Per capita nonfood uses, 1952-54, 1957-59, 1962, 1963 and projections for 1968

Item	Average		1962	Estimated 1963	Projected 1968
	1952-54	1957-59			
	Lb.	Lb.	Lb.	Lb.	Lb.
Major nonfood uses					
Cotton	25.6	22.7	22.9	21.6	20.5
Wool (scoured)	3.2	2.7	3.1	3.0	2.8
Tobacco	12.0	10.8	10.8	10.9	11.5
Industrial oils	21.6	23.7	23.7	24	24.5
Grains(excluding feed and seed)	64.5	67.2	66.9	70.0	75.0

The Foreign Market

Record exports of farm products in recent years reflect expanding commercial markets and substantial shipments under Food for Peace and other export programs. Exports are estimated at a record level in calendar year 1963, nearly double the volume exported in 1952-54. This volume is estimated at around 16 percent of total farm output. But export markets in 1962-63 took around half of the wheat, rice, edible tallow, and soybeans (including bean equivalent of oil and meal); around one-fifth of the feed grains and cotton; and substantial quantities of tobacco, fruits, and other products (table 3). The value of agricultural exports account for about one-fourth of total exports.

Under current program assumptions, the value of agricultural exports is projected to around \$6 billion by 1968. This would be around a fifth above the large exports of recent years and would equal the unusually large exports now indicated for 1963-64. Much of the

increase is indicated for grains and fats and oils reflecting, for example, around 800 million bushels of wheat, more than 20 million tons of feed grains, and 6 1/4 billion pounds of food fats. These projections make no assumption with respect to current negotiations for increased exports of wheat and some other foods to Communist-bloc countries.

In addition to an expansion in commercial exports, current programs assume as vigorous Food for Peace program with continued large exports under P. L. 480 and other programs. Projected exports, as a result, reflect continued large shipments of grains, cotton and oils under the Food for Peace program as well as a further rise in dollar sales. The dollar sales may account for around two-thirds of total exports projected in 1968. Program exports under Food for Peace and other programs would account for about one-third of the total (figure 4).

Table 3.--Exports of major farm products, crop years, 1952-54, 1957-59, 1962-63 and projections to 1968

Item	Unit	Average		1962-63	Projected 1968
		1952-54	1957-59		
Wheat	Mil. bu.	270	452	639	800
Rice, rough	Mil. cwt.	20.7	22.4	36	34
Feed grain	Mil. tons	4.9	11.7	16.5	20.5
Food fats	Mil. lb.	1,600	3,169	4,250	6,230
Inedible tallow and grease	Mil. lb.	1,174	1,379	1,596	2,185
Cotton	Mil. bales	3.4	5.2	3.4	5

PROJECTED EXPORTS ABOVE \$6 BILLION LEVEL

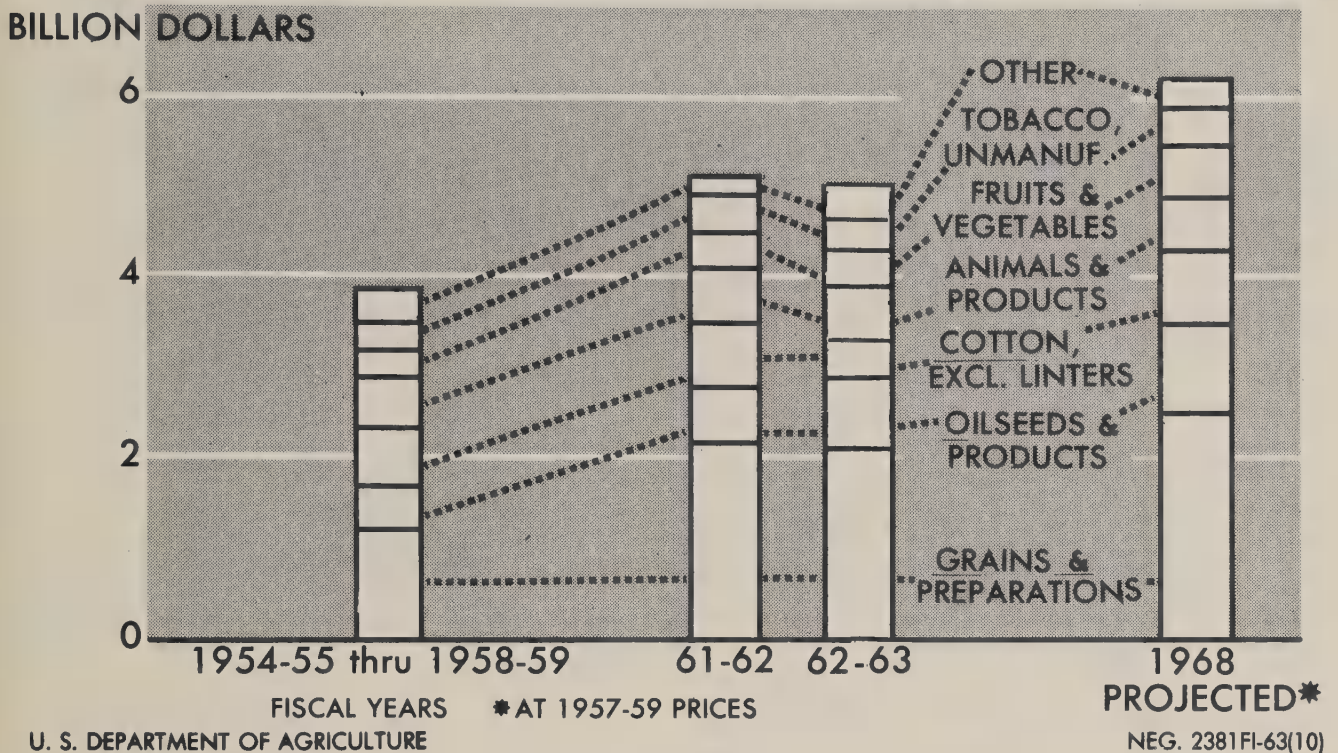


Figure 4

Projected Utilization

Total utilization of farm products is projected for 1968 at about 9 percent above the relatively high level of domestic use and exports estimated for 1963. The increase is slightly smaller than that projected for population. Domestic food use of farm products increases a little more than population growth (figure 5). But the decline in per capita nonfood uses of farm products is projected to increase for the next 5 years, under current program assumptions. Exports of crops projected for 1968 may total round a tenth larger than record shipments now indicated for calendar year 1963.

Although per capita consumption of food would change very little from current rates, the projected rise of about 12 percent in per capita consumer buying power would strengthen the market for preferred foods. However, projected utilization of livestock products from the record high in 1963 reflects primarily population growth. But utilization of beef and veal and poultry is projected to increase around 15 percent from 1963.

By comparison, very small gains in total utilization are shown for pork, lamb, and eggs reflecting the further decline in per capita consumption indicated for these foods. The projected decline in per capita use of dairy products is large enough to offset the effect of population growth. Estimated utilization in 1963 and the similar volume projected for 1968 include distribution under domestic food program as well as substantial exports under Food for Peace programs (table 4).

The domestic market for food from crops is projected to rise a little more than population. Nonfood uses also will rise, though less rapidly than population growth. As a result, combined utilization (domestic use and exports) of crops projected for 1968 is up about a tenth from 1963. Largest gains are indicated for wheat, soybeans, and cotton. Increased use of wheat for feed and a substantial increase in exports are projected under the lower support price assumed beginning with

Table 4.--Livestock product utilization, 1952-54, 1957-59, 1962, 1963 and projections for 1968 ^{1/}

Commodity	Average 1952-54	Average 1957-59	1962	Estimated 1963	Projected 1968
	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
Beef and veal	13,448	15,750	17,766	19,040	21,770
Pork, excluding lard	10,641	11,137	12,027	12,385	12,700
Lamb and mutton	709	760	955	906	940
Chicken and turkey	4,404	5,951	7,228	7,302	8,485
Dairy products ^{2/}	116,489	124,338	123,765	126,129	127,525
	Mil. doz.	Mil. doz.	Mil. doz.	Mil. doz.	Mil. doz.
Eggs	5,360	5,482	5,354	5,322	5,455

^{1/} Utilization includes domestic consumption and exports.

^{2/} Utilization of dairy products includes domestic distribution programs and shipments under special export programs.

the 1964 crop. Increased feeding of wheat also partially explains a relatively small gain projected in the use of feed grains. Both domestic use and exports of soybeans are expected to rise with total utilization in 1967-68 some 20 to 25 percent above 1962-63. A sizable increase in utilization of cotton is projected from 1962-63, but the increase is primarily a recovery from the very small--3.4 million bale--exports in 1962-63.

Consumption of vegetables as a whole is projected to increase about the same as population. With little change in per capita use anticipated, potato consumption also is expected to increase about in line with population growth. There will likely be a sizable increase in the utilization of citrus from very low levels in 1963. But

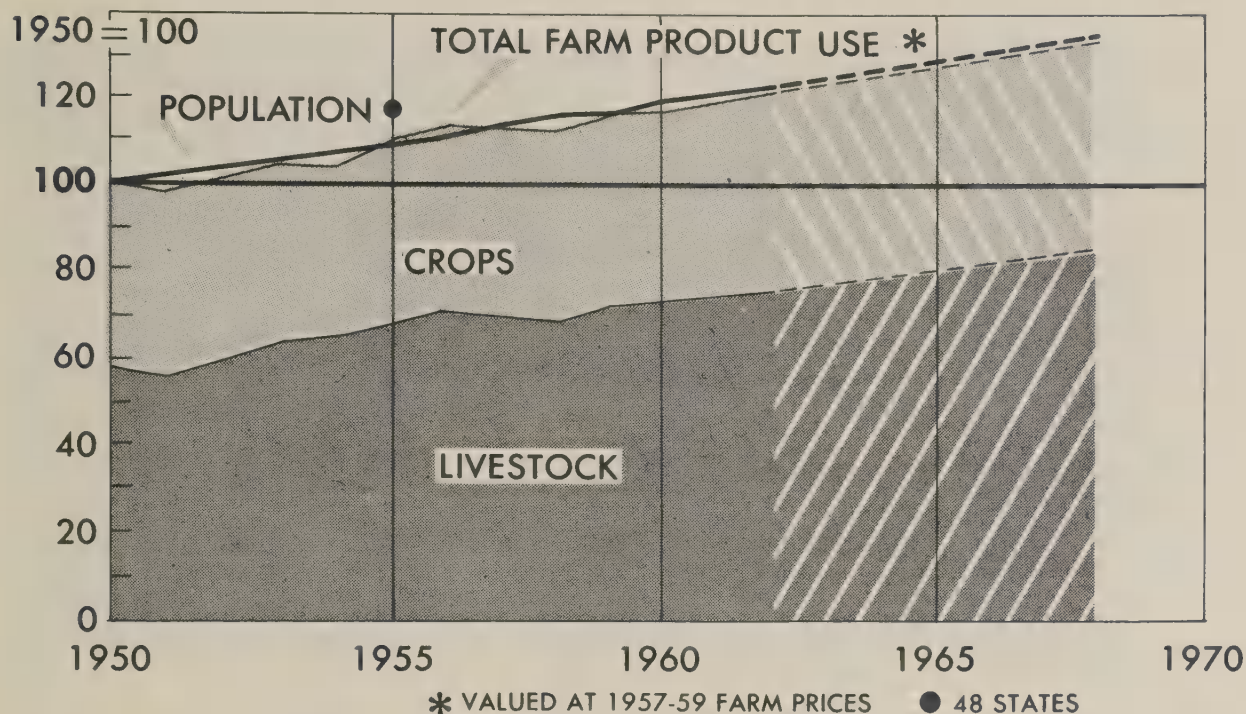
the increase will depend on how rapidly citrus production recovers from the effects of recent frost damage. Consumption of other fruit is projected to rise, possibly by 10 to 15 percent in the next 5 years.

Domestic markets for feed and seed currently account for 40 to 45 percent of crop output. Possible technological changes, product-feed price relationships, and the projected livestock production mix do not suggest much change in feeding rates under current program assumptions. Accordingly, requirements for feed concentrates increase about the same as livestock production. The strong consumer preference for beef may step up the demand for pasture and forages a bit more rapidly than for concentrates (table 5).

Table 5.--Domestic use and exports of selected crops, 1957-59, 1962-63 and projections for 1968

Commodity	Unit	Total 1957-59	1962-63			Projected 1967-68		
			Total	Domestic use	Export	Total	Domestic use	Export
Feed grains	Mil. tons	133.9	152.6	136.1	16.5	168.8	148.4	20.4
Corn	Mil. bu.	3,287	3,990	3,602	388	4,441	3,941	500
Wheat	Mil. bu.	1,051.9	1,230.7	592.0	638.7	1,515.0	715.0	800.0
Rice, rough	Mil. cwt.	49.2	65.1	28.9	36.2	63.5	29.3	34.2
Soybeans	Mil. bu.	528.0	722.8	542.8	180.0	888.0	648.0	240.0
Cotton	Mil. bales	14.0	12.8	8.4	3.4	13.8	8.8	5.0

POPULATION, USE OF FARM PRODUCTS PARALLEL



U. S. DEPARTMENT OF AGRICULTURE

NEG. 2382FI-63(10)

Figure 5

OUTPUT AND FARM ORGANIZATION

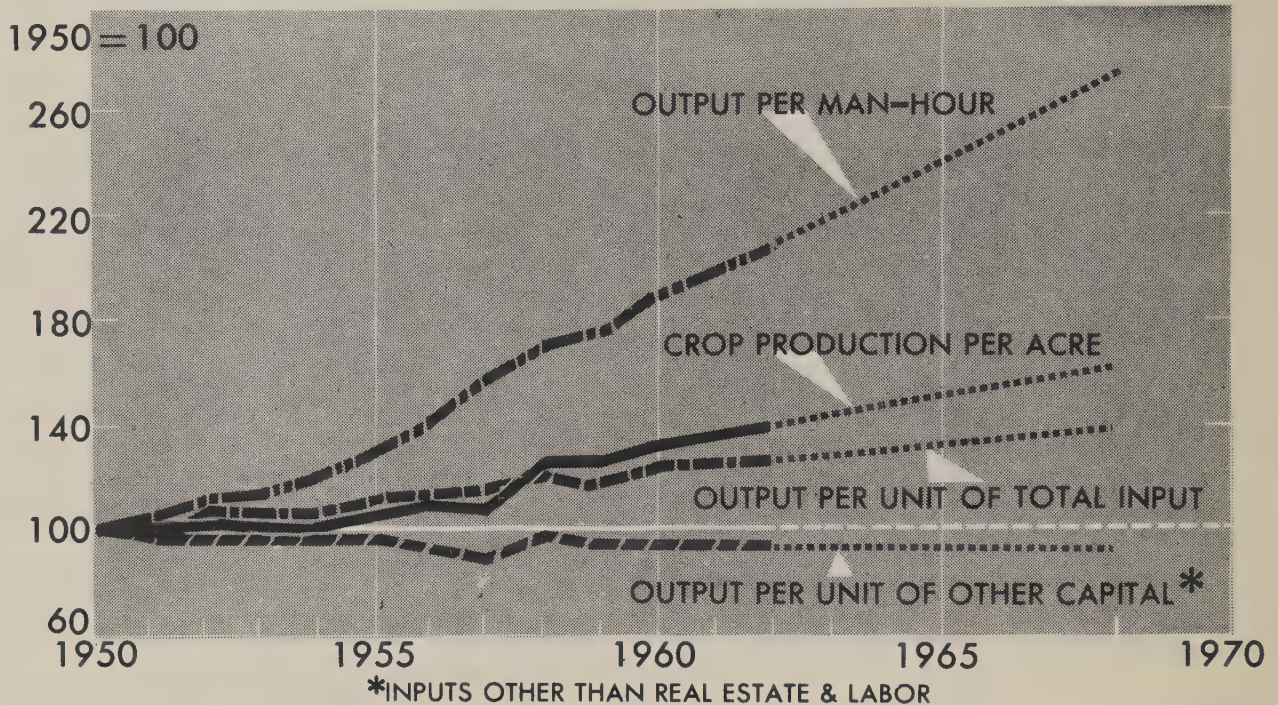
Greatly increased efficiencies in agriculture, together with moderate gains in demand, have resulted in continued pressure of supplies on available markets outlets. Technological developments and shifts in the relative cost of resources have resulted in extensive changes in the size and organization of farms and in the productivity of resources. The rise in total farm output over the past decade has been limited by the relatively small increase in the past 3 years when acreage was reduced under terms of the feed grain and wheat programs. Cropland used for crops in 1963 totaled 11 percent less and the input of labor was more than one-third smaller than in 1952-54. The impact of these reductions was largely offset by increased use of fertilizer, capital, and other nonfarm inputs.

Technological developments in agriculture and increased use of capital, fertilizer and other nonfarm inputs have contributed to a pronounced trend toward fewer, larger, and more efficient farms. Farms with

sales above \$20,000 more than doubled in the 1950 decade; those with sales of \$10,000 to \$20,000 per farm increased nearly 50 percent. These increases were accompanied by a sharp reduction in the smaller farms other than part-time and part-retirement farms. The number of farms may be down to around 3 1/2 million this year, a decline of nearly 1 1/2 million over the past decade. If recent trends continue, the number of farms may decline to around 3 million units by 1968.

Relative prices, like technology, have figured importantly in shifts in resource use and in the trend toward larger farms. Relatively high prices for labor and land have led to the substitution of other resources, particularly fertilizer and capital. With new technology and shifts in resource use, output per unit of total inputs and livestock production per breeding unit in 1963 were about one-fifth above a decade earlier. Crop production per acre was up 31 percent and output per man-hour about 90 percent from the 1952-54 average (figure 6).

OUTPUT PER MAN-HOUR TO CONTINUE RAPID RISE



U. S. DEPARTMENT OF AGRICULTURE

NEG. 2384FI-63(10)

Figure 6

Employment in agriculture is estimated at about 6 1/2 million in 1963 compared with nearly 9 million a decade earlier. 1/ Total farm population also declined very sharply over this period and may total less than 13 1/2 million in 1963 compared with 20 million a decade earlier. Currently the farm population and agricultural employment represent approximately 7 percent of the total for the U. S. Projections for the next 5 years point to a continuation of recent trends in resource use and a further decline in farm employment. The farm population also is expected to decline though possibly somewhat less rapidly than over the past decade. Continued technological developments and shifts in resource use imply further increases in yields and productivity in general.

Capital investment in agriculture has risen as farms became mechanized and grew larger and as labor became relatively more costly. However, the total quantity of productive assets in agriculture--land, farm machinery and equipment, inventories and working capital--increased only about 10 percent over the 1950

decade. But average investment per farm increased more than 40 percent, as farm numbers declined. This trend likely will continue, primarily reflecting farm consolidation. The total volume of assets used in agriculture may change little.

Cropland used for crops totaled 335 million acres in 1963, up 2 percent from 1962. This acreage compares with an average of 357 million used in 1957-59 and 380 million in 1952-54. Land classified as cropland is estimated at around 455 to 460 million acres. The 335 million acres used for crops in 1963 includes harvested acreage, crop failure, and summer fallow. Around 65 million acres of this is usually pastured. The remaining 55 to 60 million acres of cropland consists primarily of acreage in the Conservation Reserve and in the feed grain and wheat programs as well as some other idle land. Output and yields projected under current programs for 1968 point to an increase of about 10 million in acreage used for crops. Accordingly, projections for 1968 imply that land under programs and other idle land may total around 45 million acres.

1/ Based on Statistical Reporting Service concept.

Projected Output and Imbalances

Farm output is projected for 1968, under current programs, at a level 11 percent above 1963. This increase is a bit larger than the projected increase in utilization from 1963 when a "pulldown" in grain stocks supplied part of the record level of utilization. Production of crops would increase by 11 percent in the next 5 years (figure 7). Projected production for most commodities matches increases in utilization. Accordingly, compared with 1963, largest output increases are projected for beef, poultry, soybeans, and wheat. Very small increases are indicated for milk, eggs, pork, cotton, and tobacco (table 6).

Production of livestock products is projected to increase about 10 percent by 1968 from the record high output estimated for 1963. Slaughter of beef increases around 18 percent and poultry around 15 percent from 1963. But production of pork, eggs, and

milk increases less than 5 percent from 1963 levels. These changes reflect primarily the projected increases in utilization at average prices for livestock products near current levels. With production of dairy products currently in surplus, even a small increase in output would provide ample supplies for continued large exports under special Food for Peace programs.

The feed grain program assumption would limit output sufficiently to reduce carryover stocks of feed grain to around the assumed normal of 45 million tons sometime before 1968. Wheat acreage is projected to increase under the 1964 program assumption and production may rise to nearly 1 1/2 billion bushels. This compares with a 1963 crop of over 1.1 billion bushels (table 7). With domestic feed use and exports of wheat projected to rise, a reduction of wheat stocks

Table 6.--Farm production and related data, 1952-54, 1957-59, 1962, 1963 and projected 1968

(Indexes 1957-59 = 100)

Item	Average 1952-54	Average 1957-59	1962	Estimated 1963	Projected 1968	
					Index	Percent change from 1963
Farm output	93	100	108	110	122	11
Livestock production	94	100	107	109	120	10
Meat animals	96	100	108	110	126	15
Dairy products	96	100	104	103	105	2
Poultry products	84	100	111	113	125	11
Crop production	94	100	108	110	122	11
Feed grains	79	100	101	108	120	11
Hay and forage	91	100	106	101	113	12
Food grains	99	100	97	101	125	24
Oil crops	66	100	123	132	166	26
Cotton	123	100	119	120	122	2
Vegetables ^{1/}	93	100	109	109	114	5
Cropland used for crops	106	100	92	94	97	3
Crop production per acre	89	100	117	117	126	8
Farm labor	131	100	85	82	74	-10
Other inputs ^{2/}	90	100	108	112	121	8

^{1/} Including potatoes, dry beans and peas as well as truck crops for processing and fresh market.

^{2/} Inputs other than labor and farm real estate.

FARM OUTPUT TO CONTINUE RISING INTO '68

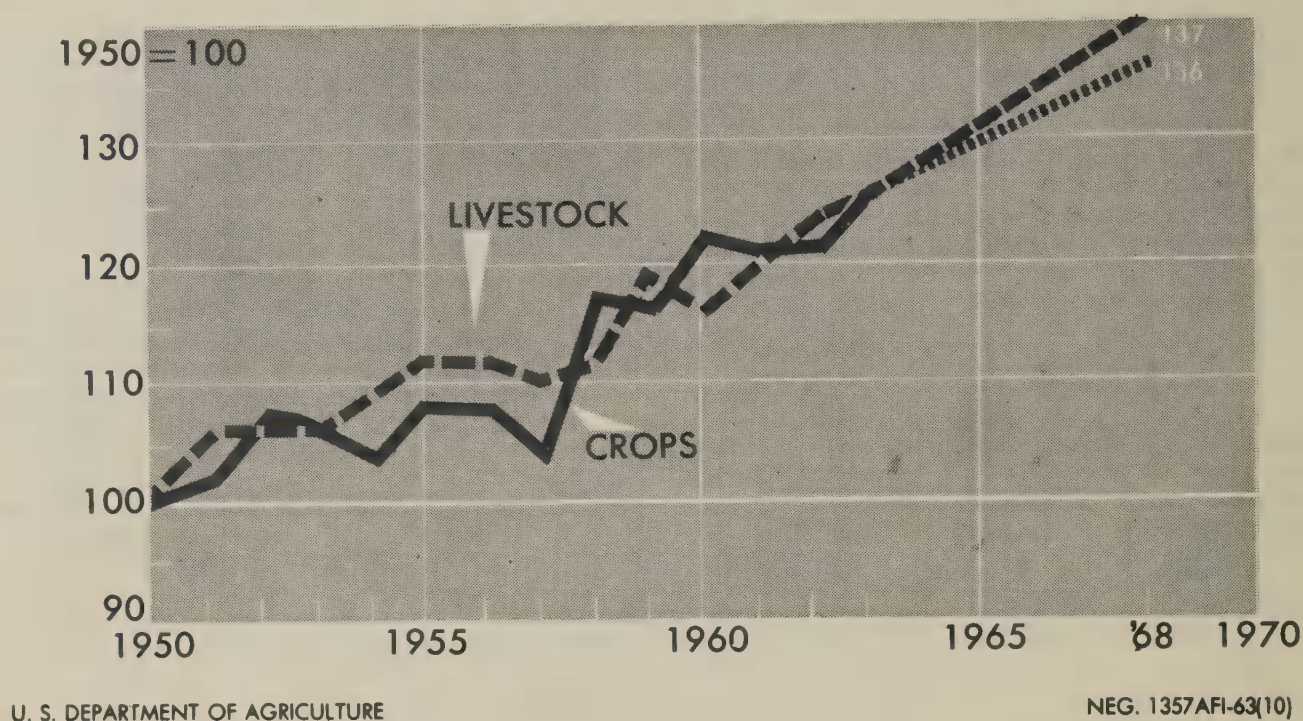


Figure 7

is indicated. If wheat exports increase to a billion bushels this year as expected, the carryover of wheat may be reduced more than a third during the 1963-64 marketing year. Under current programs for cotton, production is projected to continue around the present rate. Utilization, under the same assumption, rises from the low level in 1962-63 but not up to the 1957-59 level. The balance suggests a further build up in carry-over stocks of cotton.

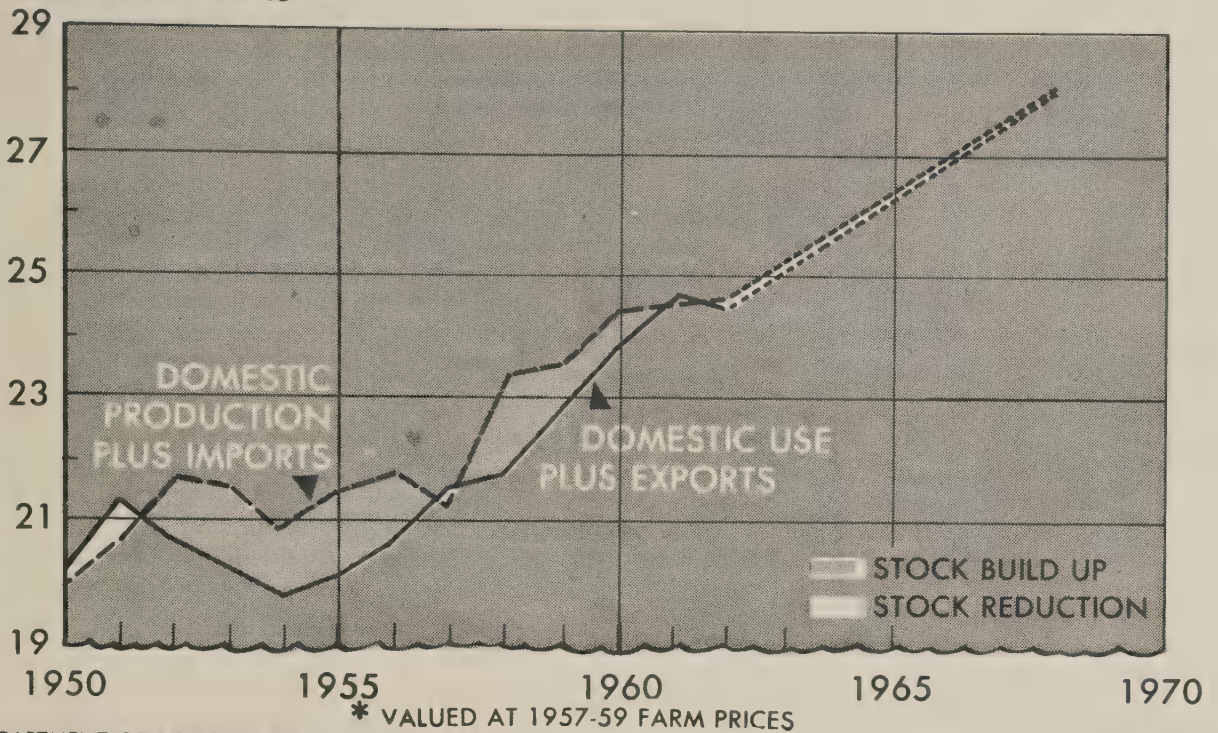
Prospective demand increases and current programs point to a continued rise in production of soybeans, possibly to a level around 915 million bushels from an estimated crop of 727 million in 1963. Such an increase probably would result in continued excess production of vegetable oils. Production increases projected for most other commodities largely reflect expected increases in utilization, though it may take several years for production of citrus to recover (figure 8).

Table 7. Crop output utilization balance, crop years, 1957-59, 1962-63 and projected 1967-68

Commodity	Unit	1957-59 average		1962-63 average		Projected 1967-68	
		Output	Utilization	Output	Utilization	Output	Utilization
Feed grain	Mil. ton	142.0	133.9	143.1	152.6	168.3	168.8
Corn	Mil. bu.	3,409	3,287	3,644	3,990	4,480	4,440
Wheat	Mil. bu.	1,178.1	1,051.9	1,093	1,230.7	1,430	1,515
Rice, rough	Mil. cwt.	47.1	49.2	64.5	65.1	63.2	63.5
Soybeans	Mil. bu.	532.2	528.0	675.2	722.8	913	888
Cotton	Mil. bales	12.1	14.0	14.8	11.8	14.7	13.8

CROP PRODUCTION AND USE SEEN CLOSE IN '68

BILLION DOLLARS *



U. S. DEPARTMENT OF AGRICULTURE

NEG. 2356FI-63(9)

Figure 8

FARM PRICES AND INCOMES

Since the mid-1950's prices received by farmers have held relatively steady with the index ranging between 230 and 250 (1910-14=100). In recent years average crop prices have strengthened some due primarily to operations of farm price support programs. Livestock product prices have drifted slowly downward under the impact of a rising volume of marketings. Prices paid by farmers, on the other hand, have continued to rise and estimates for 1963 are about 7 percent above the 1957-59 average. Realized net incomes are now below a decade back. But they have risen in recent years and estimated net income this year is up about 6 percent from the 1957-59 average. With farm numbers declining rapidly, net farm income per farm rose a fourth over the 5 years.

PRICES RECEIVED

Under current program assumptions, prices received by farmers projected for 1968 average 3 percent below the 242 (1910-14=100) estimated for 1963. Slightly lower average farm product prices reflect crop prices for 1968 about 5 percent below 1963. The difference is due primarily to the expected reduction in the price of wheat. Prices under these assumptions reflect a support price for wheat at \$1.25 per bushel compared with a loan rate of \$1.82 on 1963-crop wheat. Feed grain prices generally reflect the loan rate of \$1.10 per bushel for corn. Prices for cotton, the oil crops, tobacco, and dairy products were assumed at support levels for the 1963 crop (table 8).

Table 8.--Prices received by farmers, 1952-54, 1957-59, 1962, 1963 and projections for 1968 ^{1/}

Item	Unit	Average 1952-54	Average 1957-59	1962	Estimated 1963	Projected 1968
Livestock products	1910-14=100	274	258	255	246	245
Beef cattle	Dol. per cwt.	18.87	20.57	21.30	20.10	20.00
Hogs	Dol. per cwt.	20.27	17.17	16.30	15.40	15.50
All chickens	Dol. per cwt.	.242	.170	.146	.141	.130
Milk, wholesale	Dol. per cwt.	4.38	4.17	4.11	4.10	4.10
Eggs	Dol. per cwt.	.420	.348	.337	.360	.330
Crops	1910-14=100	250	223	230	235	223
Wheat	Dol. per bu.	2.08	1.81	2.00	1.92	1.25
Corn	Dol. per bu.	1.48	1.09	1.11	1.09	1.10
Soybeans	Dol. per bu.	2.63	2.01	2.34	2.44	2.25
Cotton (Am. Upland)	Dol. per lb.	.3326	.3137	.3160	.3182	^{2/} .3172
Fruit	1910-14=100	198	333	220	268	240
Vegetables, commercial	1910-14=100	239	233	244	233	230
All farm products	1910-14=100	263	242	243	242	235

^{1/} Weighted season average prices.

^{2/} Support price for average quality.

Despite expanding supplies, livestock product prices are fairly well maintained, under current program assumptions. The considerable increase in demand, particularly for meats, enables the market to absorb an expanding production without unduly depressing prices.

FARM INCOME

The output increase and a small decline in average prices projected for 1968 suggest a gain in cash receipts from marketings of around 8 percent from 1963. Larger cash receipts are projected for all commodities except wheat. A larger volume of marketings is projected for wheat, but much lower prices would result in substantially smaller cash receipts to wheat producers.

Payments directly to farmers under programs for feed grains and wheat, soil conservation, and special commodity programs (wool, sugar) are estimated for 1968 around \$200 to \$300 million below the \$1.8 billion estimated for 1963. Nonmoney income--the income

received as home produced food, fuel, housing, etc.--also would trend downward as the number of farms declines. Accordingly, gross income, under current program assumptions would rise only around 5 percent or so from the \$41 billion estimated for 1963. With a projected increase of around a fifth for inputs other than land and labor, farm production expenses would increase, probably somewhat more than gross income. Realized net farm income, as a result is projected to decline around a billion dollars from the \$12 1/4 billion estimated for 1963. But realized net farm income per farm would rise nearly a tenth, if the recent downtrend in farm numbers continues.

Program costs, estimated for current programs, trend down slowly over the period. Cost estimates which include the 1964-crop program for wheat, would total substantially smaller than for the 1963 program, but the income of wheat producers also would be sharply reduced. The cost of the dairy product and cotton programs is projected to rise slightly from current levels, while feed grain program costs would decline as utilization expands and fewer acres need to be diverted.

ALTERNATIVE PROGRAM ASSUMPTIONS

Projections were prepared under other price support and production control alternatives. I would like to summarize briefly the results of projections based on an assumed unlimited production or modified free market assumption.

In general, no farm programs involving production limitations are assumed under this alternative. However, export programs, domestic distribution programs, and marketings orders would continue at levels specified under the current program assumptions. Stocks presently held by the Government would be worked down through Food for Peace outlets so as to avoid dumping stocks on the domestic market.

United States agriculture is operating well below its potential capacity. With ■ relaxation of controls on the use of cropland and on production, the initial increase in output could be abrupt. And output likely would continue larger than under current program assumptions. Projected demand and output under the free market assumptions imply average prices received for farm products around one-fifth below current levels.

The domestic market would respond to lower prices, but the gain above the current program projections likely would be small in view of the very low price elasticity of demand for food. Projected per capita food consumption is up about 1 1/2 to 2 percent from 1963, a bit more than under current programs. Nonfood use per person, however, is projected to rise around 8 percent compared with a further decline projected under current programs. Feed requirements also would increase more under the free market assumption. The demand for livestock products also increases somewhat more. In addition, with relatively low prices for feed, a higher rate of concentrate feeding would be likely. Larger exports also are projected, reflecting a continuation of the Food for Peach programs and substantially lower prices under the free market assumptions.

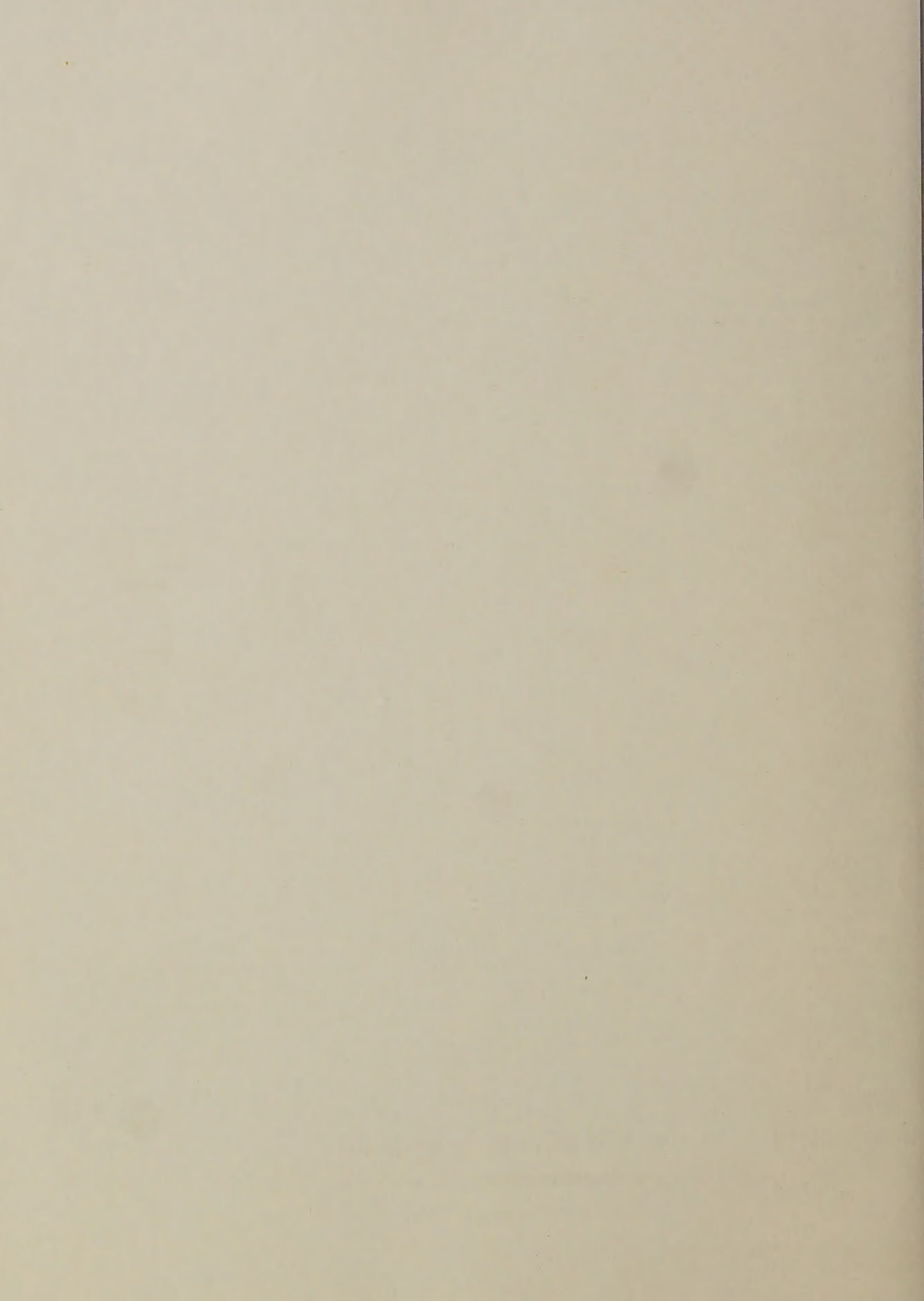
Livestock production increases about 12 percent from the record 1963 output. Without acreage controls, crop output is projected to increase some 15 to 16 percent. The greater increase in crop output reflects larger feed requirements, and somewhat larger exports under the free market assumption. Much land now idle under various programs would be returned to production under the free market assumptions. Acreage used for crops may total about 25 million larger than under current programs. Much lower prices would tend to limit increases in the use of fertilizer and other inputs.

Crop production per acre would increase but, with cultivation of more land and some reduction in inputs per acre, the rise would be slower than projected under current programs.

A larger volume of farm marketings, under the unlimited production assumptions, would only partly offset the impact of lower prices on cash income. As a result, cash receipts are projected to decline around a tenth from the estimated \$36 billion in 1963. Government payments direct to farmers would be virtually eliminated. Thus, gross farm income would decline even more than cash receipts. Farm production expenses are projected to continue to rise, though the increase would be less than under current program assumptions. Costs for feed, feeder cattle, and other farm produced inputs would be much lower. Farmers also would hire less labor and nonfarm inputs probably would rise less than under the current program alternative. But with smaller gross income, net farm income would be substantially reduced, perhaps to around half the present level of realized net income. The downtrend in the number of farms may accelerate some under the free market assumptions. But net income per farm would decline, possibly to around two-thirds of the present level.

Program costs would not be completely eliminated under free market assumptions, but they would be sharply curtailed. Under this alternative, Food for Peace programs would be continued as would domestic food distribution programs. Moreover, the Government would continue to hold contingency reserves of grains, dairy products, cotton, and other farm products. Accordingly, program costs estimated for 1968 total less than half similar estimates under current program assumptions.

The removal of price supports and production control programs, even with an orderly liquidation of stocks, undoubtedly would result in a quick and very sharp decline in farm product prices and incomes. However, such a short-run price and income situation could not be considered a stable equilibrium. A reduction in prices and incomes of this magnitude would result in extensive asset reevaluation and in some resource adjustment. An examination of production changes in agriculture during the postwar years suggests some response of output to changes in prices. It is logical also to expect a greater response to price change in a period long enough to effect adjustments in fixed resources. But the output potential relative to prospective demand increases suggest lower prices and incomes under the free market assumptions.



NATIONAL AGRICULTURAL LIBRARY



1022466044

* NATIONAL AGRICULTURAL LIBRARY



1022466044